2. ALTERNATIVES, INCLUDING THE PROPOSED ACTION

This chapter describes the four alternatives for developing an updated Plan for the TVA public land surrounding Guntersville Reservoir. One alternative (Alternative A) would provide minor updates to the 1983 Plan to reflect allocation changes that have been made over the past 18 years. The other alternatives (Alternatives B1, B2 and B3) would make substantial changes to the 1983 parcel allocations to address the needs and expectations of stakeholders. The changes proposed under Alternatives B1 and B2 are based on scoping input, TVA evaluations of proposals and reservoir resource data collected as part of the land planning process. Following public review of Alternatives A, B1 and B2, TVA developed an Alternative B3 which partially grants many of the requests for zone allocation changes on parcels of TVA public land proposed under Alternative B1 (Table 2-3). Alternatives B1, B2 and B3 seek to integrate land and water resource protection needs and balance competing, and sometimes conflicting, resource uses to provide for the optimum public benefit from use of the land. TVA staff's Preferred Alternative is Alternative B3 (Blended Alternative). If approved by the TVA Board of Directors, Alternative B3 would guide TVA resource management and property administration decisions on the TVA public land surrounding Guntersville Reservoir for the next 10 years.

2.1 Alternatives

TVA is considering four alternatives for managing the TVA public land around Guntersville Reservoir. Under the No Action Alternative (Alternative A), TVA would continue to use the existing 1983 Plan with minor updates to reflect allocation changes approved by the TVA Board of Directors over the past 18 years. Under the Action Alternatives (Alternatives B1, B2, and B3), TVA would update the plan to guide future land use decisions.

2.1.1 Alternative A — No Action Alternative

Under the No Action Alternative, TVA would continue to use the 1983 Plan which currently guides land use decisions on TVA public land surrounding Guntersville Reservoir. The 1983 Plan documents actual and prospective uses indicated for the TVA public land based on 1983 information. Proposed land use requests received from external applicants or internal TVA organizations are evaluated for consistency with the 1983 Plan. Requested land uses that are consistent with the 1983 Plan can either be approved or denied based on a review of potential environmental impacts and other administrative considerations. If the request is not consistent with the designated land use, then formal TVA Board of Directors approval, following necessary review, will be required to change the designated allocation.

The 1983 Plan used 16 allocation categories, defined in Table 2-1, to allocate 150 parcels (32,584 acres) of TVA public land. Under Alternative A, the land uses

designated in the 1983 Plan would continue to be used by TVA to make land use decisions.

Allocation	Description
Agriculture	Parcels allocated for agriculture are managed to protect their potential for agricultural use, promote increased agricultural productivity, and demonstrate multiple-use developments that preserve agricultural land.
Barge Fleeting Areas	Fleeting areas are designated places where barges are switched between tows and/or barge terminals. There are currently no barge fleeting areas identified for Guntersville Reservoir.
Barge Terminal	Parcels allocated for barge terminals can be used for public or private terminal development.
Commercial Recreation	On parcels allocated for commercial recreation, TVA seeks private investor applicants who have the financial and management capability to implement a high quality recreation development on the site.
Forest Management Demonstrations	On parcels allocated for forest management demonstrations, TVA demonstrates to private non-industrial forest landowners that harvesting and other silvicultural activities can be conducted for economic benefits which resul in more productive and attractive forest stands.
Industrial Access	On parcels allocated for industrial access, industrial developers on private, back-lying land can be permitted access across TVA property for water intake, wastewater discharge, and commodity pipelines.
Industrial Sites	Parcels allocated for industrial sites can be made available to industrial developers on adjacent back-lying properties if the developers require additional land or access to the inland waterway system. Developers on these sites can be permitted access for water intake, wastewater discharge and commodity pipelines.
Minor Commercial Landing	Parcels allocated for minor commercial landings are relatively unprepared sites that can be used for the transfer of pulpwood, sand, gravel, and other natural resources between barges and trucks.
Multiple-Use Forest Management	Parcels managed for multiple-use forest management are managed to improve the forest resources and to enhance or complement other uses such as wildlife management and recreation.
Natural Areas	Parcels allocated for natural areas will generally not be considered for any activities that might alter or destroy significant natural elements. TVA assigns its natural areas to one of three categories: Small Wild Areas, Ecological Study Areas, or Habitat Protection Areas.
Navigation Safety Harbor or Landings	Safety harbors or landings are designated shoreline areas where commercial tows and recreational boats can be tied up during adverse weather conditions or equipment malfunctions.
Open Space	Parcels allocated for open space are not intensively managed but are available for continued informal public use. These parcels are generally unsuitable for development or intensive management because of size, topography, or location.
Public Recreation	On certain parcels allocated for public recreation, TVA will develop recreation facilities or encourage and provide technical assistance for recreation development by other public agencies (i.e., federal, state, county, or local government agencies). On other parcels allocated for public recreation, TVA will continue to promote informal recreation use with little or no physical development of the site.

Table 2-1 Allocation	n Category Definitions (1983)
Allocation	Description
Retained Developed	On seven of the planned parcels, TVA has already invested funds on developing the property for such uses as recreation and operations and maintenance facilities.
Timber Management	Land managed for timber management involve a series of forest treatments that maximize production of forest products and economic returns.
Wildlife Management	Parcels allocated for wildlife management are managed to protect and enhance wildlife habitats, restore depleted or regionally rare populations of certain species, and improve public access and use opportunities where appropriate.

A list of the zoned uses for each parcel in the 1983 Plan (Alternative A) is provided in Appendix B-1. In 1983, residential shoreline and other shoreline strips were not allocated. In addition, the Murphy Hill and Honeycomb Quarry Cave sites were not allocated in 1983. Murphy Hill was being considered as a coal gasification plant (discussed in Section 1.3), and the Honeycomb Quarry Cave was used as a limestone quarry and public fallout shelter.

2.2 The Plan Revision Process

Information on public concerns was obtained from the public meetings and scoping meetings with stakeholders, community leaders and peer groups as described in Section 1.4 and Appendix A-2. In addition, TVA reviewed existing and newly collected field data both on land and resource conditions. Each parcel of land was reviewed to determine its physical capability and suitability for supporting certain uses, other potential suitable uses of such land, and the needs of the public expressed during the scoping process. Based on this information, the planning team allocated land parcels to one of seven allocation zones, described in Table 2-2.

Tab	ole 2-2 Land Use Zo	one Definitions
Zon	e	Definition
1	Non-TVA Shoreland	Shoreland located above summer pool elevation that TVA does not own in fee or land never purchased by TVA. TVA is not allocating private or other non-TVA land. This category is provided to assist in comprehensive evaluation of potential environmental impacts of TVA's allocation decision. Non-TVA shoreline includes:
		Flowage easement land—Privately or publicly owned land where TVA has purchased the right to flood and/or limit structures. Flowage easement rights are generally purchased to a contour elevation. Since construction on flowage easement land is subject to TVA's 26a permitting requirements, the SMP guidelines discussed in the definition of Zone 7 would apply to the construction of residential water-use facilities fronting flowage easement land. SMP guidelines addressing land-based structures and vegetation management do not apply.
		 Privately owned reservoir land—This land was never purchased by TVA and may include, but is not limited to, residential, industrial/ commercial, or agricultural land. This land, lying below the 500-year flood elevation, is subject to TVA's 26a approvals for structures.

Tab	le 2-2 Land Use Zo	ne Definitions
Zone	e	Definition
2	TVA Project Operations	All TVA reservoir land currently used for TVA operations and public works projects includes:
		 Land adjacent to established navigation operations—Locks, lock operations and maintenance facilities, and the navigation workboat dock and bases.
		 Land used for TVA power projects operations—Generation facilities, switchyards, and transmission facilities and rights-of-way.
		 Dam reservation land—Areas used for developed and dispersed recreation, maintenance facilities, Watershed Team offices, research areas, and visitor centers.
		 Navigation safety harbors/landings—Areas used for tying off commercial barge tows and recreational boats during adverse weather conditions or equipment malfunctions.
		 Navigation dayboards and beacons—Areas with structures placed on the shoreline to facilitate navigation.
		 Public works projects—Includes fire halls, public water intakes, public water and sewer treatment plants, etc. (These projects are placed in this category as a matter of convenience and may not relate specifically to TVA projects.)*
		· Land planned for any of the above uses in the future.
3	Sensitive Resource Management	Land managed for protection and enhancement of sensitive resources. Sensitive resources, as defined by TVA, include resources protected by state or federal law or executive order and other land features/natural resources TVA considers important to the area viewscape or natural environment. Recreational natural resource activities such as hunting, wildlife observation, and camping on undeveloped sites may occur in this zone, but the overriding focus is protecting and enhancing the sensitive resource the site supports. Areas included are:
		TVA-designated sites with potentially significant archeological resources.
		 TVA land with sites/structures listed on or eligible for listing on the National Register of Historic Places.
		 Wetlands—Aquatic bed, emergent, forested, and scrub-shrub wetlands as defined by TVA.
		TVA land under easement, lease, or license to other agencies/individuals for resource protection purposes.
		 TVA land fronting land owned by other agencies/individuals for resource protection purposes.
		 Habitat Protection Areas—These TVA Natural Areas are managed to protect populations of species identified as threatened or endangered by the U.S. Fish and Wildlife Service (USFWS), state-listed species, and any unusual or exemplary biological communities/geological features.
		 Ecological Study Areas—These TVA Natural Areas are designated as suitable for ecological research and environmental education by a recognized authority or agency. They typically contain plant or animal populations of scientific interest or are of interest to an educational institution that would utilize the area.
		 Small Wild Areas—These TVA Natural Areas are managed by TVA or in cooperation with other public agencies or private conservation organizations to protect exceptional natural, scenic, or aesthetic qualities that can also support dispersed, low-impact types of outdoor recreation.

	one Definitions
Zone	Definition
	 River corridor with sensitive resources—A river corridor is a linear green space along both stream banks of selected tributaries entering a reservoir managed for light boat access at specific sites, riverside trails, and interpretive activities. These areas will be included in Zone 3 when identified sensitive resources are present.
	 Significant scenic areas—These are areas designated for visual protection because of their unique vistas or particularly scenic qualities.
	 Champion tree site— Areas designated by TVA as sites that contain the largest known individual tree of its species in that state. The state forestry agency "Champion Tree Program" designates the tree, while TVA designates the area of the sites for those located on TVA land.
	 Other sensitive ecological areas—Examples of these areas include heron rookeries, uncommon plant and animal communities, and unique cave or karst formations.
	Land planned for any of the above uses in the future.
4 Natural Resource Conservation	Land managed for the enhancement of natural resources for human use and appreciation. Management of resources is the primary focus of this zone. Appropriate activities in this zone include hunting, timber management to promote forest health, wildlife observation, and camping on undeveloped sites. Areas included are:
	 TVA land under easement, lease, or license to other agencies for wildlife or forest management purposes.
	 TVA land fronting land owned by other agencies for wildlife or forest management purposes.
	TVA land managed for wildlife or forest management projects.
	 Informal recreation areas maintained for passive, dispersed recreation activities such as hunting, hiking, bird watching, photography, primitive camping, bank fishing, and picnicking.
	 Shoreline Conservation Areas—Narrow riparian strips of vegetation between the water's edge and TVA's back-lying property that are managed for wildlife, water quality, or visual qualities.
	 Wildlife Observation Areas—TVA Natural Areas with unique concentrations of easily observed wildlife that are managed as public wildlife observation areas.
	 River corridor without sensitive resources present—A river corridor is a linear green space along both stream banks of selected tributaries entering a reservoir managed for light boat access at specific sites, riverside trails, and interpretive activities. River corridors will be included in Zone 4 unless sensitive resources are present (see Zone 3).
	· Islands of 10 acres or less.
	· Land planned for any of the above uses in the future.
5 Industrial/	Land managed for economic development purposes. Areas included are:
Commercial Development	 TVA land under easement, lease, or license to other agencies/individuals for industrial or commercial purposes.
	 TVA land fronting land owned by other agencies/individuals for industrial or commercial purposes.
	· Sites planned for future industrial use.

Tab	le 2-2 Land Use Zo	ne Definitions
Zone	e	Definition
		Types of development that can occur on this land are:
		Business parks—TVA waterfront land which supports industrial or commercial development.
		 Industrial access —Access to the waterfront by back-lying property owners across TVA property for water intakes, wastewater discharge, or conveyance of commodities (i.e., pipelines, rail, or road). Barge terminals are associated with industrial access corridors.
		 Barge terminal sites—Public or private facilities used for the transfer, loading, and unloading of commodities between barges and trucks, trains, storage areas, or industrial plants.
		 Fleeting areas—Sites used by the towing industry to switch barges between tows or barge terminals which have both off-shore and on- shore facilities.
		 Minor commercial landing—A temporary or intermittent activity that takes place without permanent improvements to the property. These sites can be used for transferring pulpwood, sand, gravel, and other natural resource commodities between barges and trucks.
		(Commercial recreation uses, such as marinas and campgrounds, are included in Zone 6.)
6	Developed Recreation	All reservoir land managed for concentrated, active recreational activities that require capital improvement and maintenance, including:
		TVA land under easement, lease, or license to other agencies/individuals for recreational purposes.
		TVA land fronting land owned by other agencies/individuals for recreational purposes.
		TVA land developed for recreational purposes such as campgrounds, day use areas, etc.
		· Land planned for any of the above uses in the future.
		Types of development that can occur on this land are:
		 Commercial recreation, e.g., marinas, boat docks, resorts, campgrounds, and golf courses.
		Public recreation, e.g., local, state and federal parks, and recreation areas.
		 Greenways, e.g., linear parks located along natural features such as lakes or ridges, or along man-made features including abandoned railways or utility rights-of-way, which link people and resources together.
		 Water access sites, e.g., boat ramps, courtesy piers, canoe access, fishing piers, vehicle parking areas, picnic areas, trails, toilet facilities, and information kiosks.
7	Residential Access	TVA-owned land where private waterfront facility applications and other land use approvals for residential shoreline alterations are considered. Requests for residential shoreline alterations are considered on parcels identified in this zone where such use was previously considered and where the proposed use would not conflict with the interests of the general public. As provided for in the SMP, residential access would be divided into three categories based on the presence of sensitive ecological resources and navigation restrictions. The categories are: (1) Shoreline Protection for shoreline segments that support sensitive ecological resources such as federal-listed threatened or endangered species, high priority state-listed species, wetlands with high function and value, archaeological or historical

Table 2-2 Land Use Zo	ne Definitions
Zone	Definition
	sites of national significance, or which contain navigation restrictions; (2) Residential Mitigation for shoreline segments where resource conditions or navigation conditions would require special analyses and perhaps specific mitigation measures, or where additional data would be needed; and (3) Managed Residential, where no sensitive resources are known to exist. Types of development/management that can occur on this land are:
	 Residential water-use facilities, e.g., docks, piers, launching ramps/driveways, marine railways, boathouses, enclosed storage space, and nonpotable water intakes.
	 Residential access corridors, e.g., pathways, wooden steps, walkways, or mulched paths which can include portable picnic tables and utility lines.
	 Shoreline stabilization, e.g., bioengineering, riprap and gabions, and retaining walls.
	 Shoreline vegetation management on TVA-owned residential access shoreland.
	· Conservation easements for protection of the shoreline.
	· Other activities, e.g., fill, excavation, grading, etc.

^{*}Compatible public works/utility projects proposed in Zones 3 and 4 will require an environmental review but will not require an allocation change.

The following assumptions were made in updating the 1983 Plan. Land currently committed to a specific use is assumed to be allocated to a zone designated for that use unless there is an overriding need to make a change. Commitments are considered to include leases, licenses, easements, outstanding land rights or existing designated natural areas. Approximately 4,773 acres (12 percent) of the TVA public land surrounding Guntersville Reservoir are allocated for existing TVA projects. Projects such as the TVA dam reservation and public works projects are allocated as committed land (Zone 2). Approximately 15,703 acres (39 percent) of the TVA public land surrounding Guntersville Reservoir are allocated to Zones 4, 5 and 6 due to existing land use agreements. These agreements, and the TVA parcels where they are located, are presented in Appendix B-2.

Approximately 4,023 acres (9.9 percent) of TVA public land surrounding Guntersville Reservoir are committed due to existing natural areas. If sensitive resources are identified on a parcel with an existing land use agreement (lease, license, etc.), that parcel would remain zoned for the committed use. However, TVA review would be needed prior to future activities that could impact the identified sensitive resources on that parcel to ensure the proposed activity would not significantly impact the identified sensitive resource(s). Agricultural licenses, are considered to be an interim use of TVA public land, are allocated to Natural Resource Conservation (Zone 4).

Over the years, TVA sold approximately 13,100 acres of land on Guntersville Reservoir, but retained a strip of land lying between the 600-foot contour and the

waters edge. The majority of these sales occurred in the mid- to late 1950s. In most cases, when this land was sold, the TVA public land adjacent to it and below the 600-foot contour was encumbered by outstanding residential access rights that gave back-lying property owners the right to request private water-use facilities subject to TVA's approval under Section 26 of the TVA Act.

The balance of uncommitted TVA public land on Guntersville Reservoir (15,737 acres) was considered subject to reevaluation. Field data was collected on many uncommitted parcels by technical specialists such as archaeologists, historic architects, wetland specialists, visual specialists, botanists, and biologists to identify areas containing sensitive resources.

Representatives from different TVA organizations including power generation, navigation, resource stewardship, recreation and economic development (the planning team) met to allocate the parcels into six of the seven planning zones (no TVA public land was allocated to Zone 1, see definition, Table 2-2). Using maps which identified the location of sensitive resources (cultural, wetlands, threatened and endangered and visual) and the data collected during the scoping process, the capability and suitability for potential uses of each parcel were discussed. The proposed allocations were made by consensus of the planning team members.

2.2.1 Action Alternatives B1 and B2

Under the Action Alternatives B1 and B2, TVA would update the 1983 Plan using resource data, updated computer mapping of acreages, stakeholder input, and TVA staff input. Private land that adjoins the reservoir is not planned. This private land includes land over which TVA has flowage easement rights to permanently or temporarily flood. The Action Alternatives include 7,295 acres of TVA public land not planned in 1983. This previously unplanned land includes the Murphy Hill site, the Honeycomb Cave Quarry site, and strips of retained land fronting TVA sale tracts. These retained strips of TVA public land encumbered with water access rights have been allocated to Residential Access (Zone 7), based on access rights as documented in the SMI. The remainder of the previously unplanned land is allocated to Natural Resource Conservation, Sensitive Resource Management, TVA Project Operations, Industrial/Commercial Development, or Developed Recreation.

Fifteen proposals for the use of 13 parcels of TVA public land were received as comments during the scoping process prior to release of the DEIS (Table 2-3). Public input on these 13 parcels was requested during the review of the Draft EIS. Under Alternative B1, Balanced Development and Recreation, these requests would be granted, and TVA would designate these 795 acres of TVA public land to Zones 2, 5 and 6. Under Alternative B2, Balanced Development and Conservation, TVA would allocate these parcels to the zone compatible with the current land use on the parcel or to Zone 4.

Table 2-3	3 Comp	parison of proposals received un	der Alternatives	B1 and B2
Parcel Number	Acres	Proposal	Alternative B1 (Balanced Development and Recreation)	Alternative B2 (Balanced Development and Conservation)
26a	456	Conners Island recreation area	Zone 6	Zone 4
40	69	Guntersville Airport expansion	Zone 2	Zone 4
127a	23.4	Additional recreation area to complement the future Wood Yard marina development at SR 35 bridge	Zone 6	Zone 4
145	0.2	Mead Park proposal at SR 117 Bridge	Zone 6	Zone 5
154a	4	Bridgeport Utilities boat ramp	Zone 6	Zone 4
159	9	Bridgeport walking trail	Zone 6	Zone 4
161a	23	NAIDA industrial site	Zone 5	Zone 4
167	26	I-24 Interchange commercial development	Zone 5	Zone 4
172	17	Nickajack Industrial Park expansion	Zone 5	Zone 4
200a	49	Marina and campground at South Sauty Creek Bridge	Zone 6	Zone 4
207a	10.4	Little Mountain Marina expansion	Zone 6	Zone 4
248	1	Cisco Steel marina proposal at SR 227 causeway	Zone 6	Zone 5
257	106.6	United Cherokee Intertribal, Guntersville City Park, or National Guard Armory	Zone 6	Zone 4

2.2.2 Action Alternative B3 (Blended Alternative)

After review of the public comments received on the DEIS, TVA developed its blended alternative (Alternative B3). In Alternative B3, TVA proposes to partially or fully allocate these parcels to accommodate 11 of the requests listed in Table 2-3. In addition, TVA received public suggestions for changes on other parcels. The suggested changes and TVA's proposed resolution in Alternative B3 are listed in Table 2-4 and further described below. Proposed zone allocations for all parcels are shown in Appendix A-1.

TVA received several comments about the potential for timber harvesting on **Parcel 2** (a portion of the former Compartment 52), and these comments requested that the parcel be allocated to Zone 3, rather than Zone 4 as proposed in Alternatives B1 and B2, because of visual concerns and because of the possibility of rare plants being located on this parcel. Forest and wildlife management activities can potentially occur in either Zones 3 or 4, if needed for wildlife management or forest health maintenance. The primary difference in management of the two zones is related to protection of identified sensitive resources. TVA's resource inventories did not identify any rare plant species that would warrant a Zone 3 designation; however, because of the special visual concerns expressed, TVA would place emphasis on visual analysis during consideration of any management activities on Parcel 2. In response comments on the DEIS, the phrase "timber harvesting" in the definition of Zone 4, Table 2-2," has been changed to "timber management to promote forest health" to clarify TVA's position. Further information on the environmental effects of forest management

and several commitments to address water quality, forest health, and aesthetic impacts of forest management have been included in Section 4.9, Proposed Mitigation Measures.

An adjoining property owner requested that **Parcel 20a** be allocated to Zone 6, Developed Recreation, to allow development as a marina or personal watercraft sales facility. Parcel 20a is proposed for Zone 7, Residential Access, under Alternatives B1 and B2 because of the existence of deeded access rights. TVA believes that this is a less than suitable marina site because of shallow water, but proposes to place the parcel in Zone 5 to recognize the potential commercial uses of this property, given its location adjacent to U.S. Highway 431. Allocation to Zone 5 will allow for water access in conjunction with use of adjoining private property as a retail sales facility.

For **Parcel 26a**, the City of Guntersville had requested 456 acres for recreation, hospitality (conference center development), and natural areas to complement the Conners Island Park development. TVA further discussed this proposal with the City of Guntersville after receiving input on the DEIS. Because the City is not yet ready to develop this portion of Conners Island, the City and TVA mutually agreed that, at the present time, a Zone 4 classification would be appropriate. However, since the City of Guntersville is the adjoining property owner, TVA will consider a future request based on the City's plans for the use of this property in accordance with any other factors that TVA may deem necessary at the time of the request. The City of Guntersville and TVA mutually agree that any allocation change be compatible with future plans and development of the Conners Island Park project.

A number of comments suggested that the proposed Alternative B1 and B2 allocation of **Parcel 39** to Zone 3, Sensitive Resource Management, was unjustified and that this parcel should be allocated for Zone 6, Developed Recreation, to allow uses compatible with the adjacent golf course. TVA confirmed surveys that found a globally imperiled habitat and a large population of at least one state-listed species and archaeological resources on this parcel. Because of the scenic views on this parcel and the cove hardwood type of habitat, TVA proposes to allocate this parcel to Zone 3 in the Blended Alternative B3 and designate a large portion of it as a Small Wild Area (SWA).

Parcel 40 was proposed in Alternative B1 for allocation to Zone 2 based on a request by the city of Guntersville for an airport runway extension at the Guntersville Municipal Airport to support the development of Conners Island Park. TVA received mixed comments (pro and con) on this parcel. Most people that commented agreed with the airport runway extension to promote the development of the industrial park. Those who disagreed with the proposed allocation prefer the parcel be placed into Zone 4, Natural Resource Conservation, as shown in Alternative B2. Concerns were raised over increased noise and air pollution resulting from the proposed runway extension. These concerns have

been addressed in the Section 4.3 of the FEIS. In Blended Alternative B3, TVA proposes to allocate this parcel to Zone 2.

A comment was received disagreeing with the proposed zone allocation of **Parcel 81** to Zone 7, Residential Access, in Alternatives B1 and B2. The comment suggested this parcel was not suitable for residential use because the water is shallow, it has good wetland habitat and residential use will require dredging and spraying for aquatic plants. This parcel has outstanding residential access rights that give back-lying property owners the right to request private water-use facilities subject to TVA's approval under Section 26 of the TVA Act (see Section 2.1 of this EIS). In the Blended Alternative B3, TVA proposes to allocate this parcel to Zone 7. However, under TVA's SMP (discussed in Section 1.3 of this FEIS), this shoreline is categorized as Residential Mitigation. Any request for a private water-use facility would require collection of additional data and possibly development of specific mitigation measures to address potential resource concerns on this site.

Comments were also received requesting a change in the status of **Parcels 101** and 111 to allow residential access. In accordance with the SMI, TVA does not plan to deny access on any parcels where residential access is currently allowed, or to open up any new land for residential access which does not have existing deeded access rights. There are no deeded residential access rights associated with Parcels 101 and 111. In addition, sensitive resources were identified on Parcel 101. In Alternative B3, TVA proposes to allocate these parcels to Zone 3 and Zone 4 respectively.

In Alternative B1, **Parcel 127a** was proposed for expanded recreational development (Zone 6) by the Jackson County Economic Development Authority. This parcel is located close to the embayment which houses the city of Scottsboro water intake and concerns were raised that additional development at this location may negatively impact water quality. Although the city of Scottsboro is exploring the feasibility of relocating its water intake, TVA agrees that further development of this site would not be appropriate until the intake has been relocated. In Alternative B3, TVA proposes to allocate this parcel to Zone 4, Natural Resource Conservation.

An individual requested that **Parcel 136** be made available for residential development in order to sell residential lots from the property. This parcel is used by the state of Alabama as the Mud Creek Wildlife Management Area and is allocated to Zone 4 in Alternatives B1 and B2. As stated in Section 2.1 of this EIS, land currently committed to a specific use will be allocated to that use unless there is an overriding need to make a change. Under the 1999 SMI, TVA limited residential access to areas with existing rights, as stated in the deeds of adjacent property owners. Parcel 136 does not have these existing deeded rights. In Alternative B3, TVA proposes to allocate this parcel to Zone 4, Natural Resource Conservation.

Comments were received requesting that a portion of **Parcel 136a** be allocated for a public boat ramp at the end of Jackson County Road 46 - Coffee Ferry Ramp. There are six existing public boat launch ramps located on Guntersville Reservoir from the B. B. Comer Bridge to the Tennessee State line and new public boat ramps are being proposed on Parcels 145 and 154a. Parcel 136a is under consideration to be included in the license portion of the state of Alabama Department of Conservation and Natural Resources (ADCNR)/TVA Wildlife Management Area (WMA) consolidation agreement. Should this parcel be included in the consolidation effort, the ADCNR could request 26a approval from TVA for a boat ramp. In Alternative B3, TVA proposes to allocate this parcel to Zone 4, Natural Resource Conservation.

The ADCNR requested that **Parcel 138** be rezoned as Natural Resource Conservation (Zone 4) and re-established as an integral component of the Crow Creek Waterfowl Refuge under long-term tenure. In Alternatives B1 and B2, this parcel was proposed to be allocated to Zone 7, Residential Access. In accordance with SMI, TVA does not plan to deny access to any parcels where residential access is currently allowed, or to open up any new land for residential access which does not have existing deeded rights. There are deeded residential access rights associated with Parcel 138 that allow residential access. In addition, no new land is proposed to be included in the TVA/ADCNR WMA consolidation effort. In Blended Alternative B3, TVA proposes to allocate this parcel to Zone 7.

Parcel 145 was proposed in Alternative B1 for a new recreation area by the state of Alabama in order to provide additional public access close to Crow Creek. The majority of public comments received support this use. In Alternative B3, TVA proposes to allocate this parcel to Zone 6.

Parcel 154a was proposed in Alternative B1 for a new recreation area by the city of Bridgeport in order to provide additional public access to the Guntersville Reservoir. The majority of public comments received support this use. In Alternative B3, TVA proposes to allocate this parcel to Zone 6.

Parcel 159 was allocated to Zone 6, Developed Recreation in Alternative B1 due to a request from the city of Bridgeport to develop a public greenway trail. The majority of public comments received support this use. In Alternative B3, TVA proposes to allocate this parcel to Zone 6.

Parcel 161a was allocated to Zone 5, Commercial/Industrial Development in Alternative B1 due to a request by the North Alabama Industrial Development Authority (NAIDA) to accommodate anticipated future industrial growth in this area. Although the majority of public comments received disagreed with this use and preferred Zone 4, TVA proposes to allocate this parcel in Zone 5 in Alternative B3 because TVA's Economic Development group is working with NAIDA and local cities to promote economic growth in this area.

Parcel 167 was allocated to Zone 5, Commercial/Industrial Development in Alternative B1 due to a request by Marion County, Tennessee, to support additional commercial development in the Kimball area. TVA received mixed comments, both pro and con, on this parcel. This parcel has been severed from Guntersville Reservoir by Interstate 24, and is in a developing commercial area. TVA believes allocating this parcel to Zone 5 would promote economic growth. In Alternative B3, TVA proposes to allocate this parcel to Zone 5.

The ADCNR requested that **Parcels 178, 180 and 206** be added to its existing WMAs. At this time, TVA does not plan to increase the size of existing WMAs. In Alternative B3, TVA proposes to allocate Parcels 178 and 180 to Zone 3, Sensitive Resource Management, and to allocate Parcel 206 (Murphy Hill) to Zone 4, Natural Resource Conservation.

An adjoining property owner requested that **Parcel 179** be allocated to Zone 6, Developed Recreation to allow for development of a church camp in the near future. It had been proposed for Zone 7, Residential Access, under Alternatives B1 and B2 because of the existence of deeded access rights. In Alternative B3, TVA proposes to allocate this parcel to Zone 7, because TVA could consider allowing the Church to construct a non-profit camp and associated water-use facilities solely for its own use.

Upon receiving an inquiry for a land swap under TVA's SMP "maintain and gain" policy (see Section 1.3) for **Parcel 181**, TVA determined that two small portions of Parcel 181 (for a combined total of 2.7 acres) had deeded access rights for water-use facilities. In Alternatives B1 and B2, Parcel 181 is allocated to Zone 3 due to the presence of extensive wetlands. In Alternative B3, TVA proposes to place the two portions of this parcel (redesignated as Parcels 181 and 181b), into Zone 7 to reflect these deeded access rights. However, under TVA's SMP (discussed in Section 1.3 of this FEIS), this shoreline is categorized as Residential Mitigation due to the presence of wetlands. Any request for a private water-use facility would require collection of additional data and possibly development of specific mitigation measures to address potential sensitive resource concerns on this site. The remaining two portions of this parcel (44.8 acres), redesignated as Parcels 181a and 181c, would remain in Zone 3.

In Alternative B1, **Parcel 200a** was allocated to Zone 6, Developed Recreation, due to a request by South Sauty Creek Resort to accommodate future commercial recreation development. TVA received mixed comments, both pro and con, to this proposal. TVA agrees that a recreational development would be appropriate in this location, but also understands local residents concerns about noise and congestion resulting from nearby commercial development. In the Blended Alternative B3, TVA has reduced the size of Parcel 200a from 48.8 to 34.5 acres in order to provide adequate buffers to screen any future commercial development from a adjoining subdivisions. The remainder of the parcel (14.3 acres), redesignated as Parcels 200b and 200c, is allocated to Zone 4, Natural Resource Conservation.

In Alternative B1, Parcel 207a was allocated to Zone 6, Developed Recreation, based on a request by Little Mountain Marina/Wakefield Enterprises to accommodate a proposed future commercial recreation expansion. The majority of comments received support this use. In the Blended Alternative B3, TVA proposes to allocate this parcel in Zone 6 to support proposed campground expansion.

In Alternative B1, Parcel 248 was allocated to Zone 6, Developed Recreation, based on a request by Cisco Steel to convert its existing industrial operation on this parcel to a commercial marina. Alternative B2 would allocate Parcel 248 to Zone 5, its current land use. Because the majority of comments received support the proposed use—it was considered an improvement over the current use—, in the Blended Alternative B3, TVA proposes to allocate this parcel to Zone 6, Developed Recreation.

Parcel 257 was the subject of considerable comment related to proposed uses by United Cherokee Intertribal (UCI) for a tribal headquarters and interpretive center, by the city of Guntersville for use as a ballpark, and by the National Guard Armory for continued use of a 20-acre field on a portion of the parcel for their military maneuvers. Alternative B1 allocated this parcel to Zone 6. Because the adjoining property owners strongly opposed both the city's and UCI's requests, in the Blended Alternative B3, TVA proposes to allocates most of Parcel 257 to Zone 4 (renamed as Parcel 257a). The remaining portion of Parcel 257 (14.5 acres), would be allocated to Zone 2, TVA Project Operations to accommodate continued use by the National Guard as a recreational field and UCI for an annual pow-wow. TVA is willing to consider future partnerships with these organizations to promote human use and appreciation of these undeveloped areas and natural shorelines.

Table 2	-4 Prop	osed Zones for Alternative	B3 (Blended A	Alternative)	
Parcel Number	Acres	Proposal or Suggestion During Public Review	Alternative B1 (Balanced Development and Recreation	Alternative B2 (Balanced Development and Conservation	Alternative B3 (Blended Alternative)
2	568.7	Sensitive Resource Management-(Zone 3)	Zone 4	Zone 4	Zone 4, place special emphasis on visual analysis during consideration of management activities
20a	1.6	Personal Watercraft Sales Facility	Zone 7	Zone 7	Zone 5
26a	439.0	Conners Island Park Recreation Area	Zone 6	Zone 4	Zone 4, work with city of Guntersville in the future on development proposals for Conners Island Park
39	314.9	Recreational Zone 6 Designation	Zone 3	Zone 3	Zone 3

Table 2-	4 Prop	osed Zones for Alternative	B3 (Blended A	Alternative)	
Parcel Number	Acres	Proposal or Suggestion During Public Review	Alternative B1 (Balanced Development and	Alternative B2 (Balanced Development and	Alternative B3 (Blended Alternative)
			Recreation	Conservation	
40	69.1	Guntersville Airport Expansion	Zone 2	Zone 4	Zone 2
81	10.5	Prohibit Residential Use-Zone 4	Zone 7	Zone 7	Zone 7
101	42.8	Allow Residential Use-Zone 7	Zone 3	Zone 3	Zone 3
111	61.0	Allow Residential Use-Zone 7	Zone 4	Zone 4	Zone 4
127a	26.9	Additional Recreation Area to Complement the Future Wood Yard Marina Development at SR 35 Bridge	Zone 6	Zone 4	Zone 4
136	3,944.6	Allow Residential Use-Zone 7	Zone 4	Zone 4	Zone 4
136a	31.2	Recreation Use - Public Ramp	Zone 4	Zone 4	Zone 4
138	5.2	Oppose Residential Use-Zone 7; Prefer Zone 4 and add to Wildlife Management Area	Zone 7	Zone 7	Zone 7
145	0.2	Mead Park Proposal at SR 117 Bridge	Zone 6	Zone 5	Zone 6
154a	3.8	Bridgeport Utilities Boat Ramp	Zone 6	Zone 4	Zone 6
159	9.2	Bridgeport Walking Trail	Zone 6	Zone 4	Zone 6
161a	22.7	NAIDA Industrial Access Site	Zone 5	Zone 4	Zone 5
167	26.3	I-24 Interchange Commercial Development	Zone 5	Zone 4	Zone 5
172	16.7	Nickajack Industrial Park Expansion	Zone 5	Zone 4	Zone 5
178	38.2	Add to Wildlife Management Area	Zone 3	Zone 3	Zone 3
179	2.8	Add to Wildlife Management Area-Zone 4 or Change to Zone 6 to allow Church Camp	Zone 7	Zone 7	Zone 7; allow water use facilities for church camp
180	3,429.2	Add to Wildlife Management Area	Zone 3	Zone 3	Zone 3
181	47.5	Verify Existence of Residential Access Rights Across Parcel	Zone 3	Zone 3	Zone 7 (2.7 acres) Zone 3 (44.8 acres)
200a	48.8	Marina and Campground at South Sauty Creek Bridge	Zone 6	Zone 4	Zone 6 (35.6 acres); Zone 4 (13.2 acres)
206	1,510.5	Add to Wildlife Management Area	Zone 4	Zone 4	Zone 4
207a	10.4	Little Mountain Marina Expansion	Zone 6	Zone 4	Zone 6
248	1.3	Cisco Steel Marina Proposal at SR 227 Causeway	Zone 6	Zone 5	Zone 6
257	106.6	United Cherokee Intertribal, Guntersville City Park, or National Guard Armory	Zone 6	Zone 4	Zone 4 (92.1 ac); Zone 2 (14.5 ac)

2.3 Comparison of Alternatives

This section compares the environmental impacts of the four alternatives based on the information and analyses provided in Chapters 3, the Affected Environment and 4, Environmental Consequences.

Section 101 of the National Environmental Policy Act (NEPA) states that it is the policy of the Federal government to use all practicable means and measures, in a

manner calculated to foster and promote the general welfare, to create and maintain conditions under which man and nature can exist in productive harmony, and fulfill the social, economic and other requirements of present and future generations. TVA believes that all alternatives would be consistent with this policy, and TVA has interpreted the regulations and laws governing it to be consistent with this policy, as required by Section 102(1). Because of the environmental safeguards included in each alternative, a wide range of beneficial uses of the environment could be obtained without degradation or unintended consequences under each alternative. Alternatives B1 and B3, in attempting to strike a balance of conservation with development, are consistent with NEPA goals of achieving a balance between population and resource use that permits high standards of living and a wide sharing of life's amenities. Alternatives A, B1, and B3, which could lead to increased development of recreational and limited commercial or industrial facilities, would contain environmental safeguards to protect important historic, cultural, and natural aspects of our national heritage while allowing a wide range of economically beneficial uses of the environment. Alternative B2, which emphasizes land conservation, is also consistent with the NEPA goal to preserve important historic, cultural, and natural aspects of our national heritage.

Direct comparison of parcel land uses under Alternative A is difficult since the 1983 Plan allocation definitions and the proposed (Alternatives B1, B2, and B3) zone definitions are not the same. The allocated land uses in the 1983 Plan (Alternative A) and the proposed allocations for each TVA parcel are identified and compared in Appendix B-1. The approximate alignment of old land use categories with new zones is presented in Table 2-5. In the 1983 Plan, many of the parcels were designated for multiple uses. The footnote to Table 2-5 explains the impact of multiple use allocations in the comparison.

The existing 1983 Plan allocated 32,584 acres and the current planning effort allocates an additional 7,652 acres. The total acres and percent allocated for each zone are listed in Table 2-5.

Table 2-5 Comparison of Gun	f Guntersville Reservoir Land Uses Under Alternatives A, B1, B2, and B3	servoir La	nd Uses I	Jnder Alte	rnatives .	A, B1, B2,	and B3		
		Alternative A Existing 1983 Plan	tive A 983 Plan	Alternative B1 Balanced Development and Recreation	ve B1 ced ent and tion	Alternative B2 Balanced Development and Conservation	ve B2 ced ent and ation	Alternative B3 Blended Alternative	ive B3 Iternative
Existing (1983) Allocation Categories	Current Land Use Zones	Acres	Percent	Acres	Percent	Acres	Percent	Acres	Percent
Navigation Safety Harbors or Landings Retained Developed	Zone 2 - TVA Project Operations	4,407.9	13.5	4,996.2	12.4	4,927.2	12.2	5,079.5	12.7
Natural Areas	Zone 3 - Sensitive Resource Management	4,041.6	12.4	10,121.5	25.2	10,121.5	25.2	10,259.8	25.5
Timber Management Forest Management Demonstrations Multiple-Use Forest Management Wildlife Management Agriculture Open Space	Zone 4 - Natural Resource Conservation	24,972.4	76.7	21,867.1	54.4	22,660.4	56.3	22,323.5	55.5
Industrial Sites Industrial Access Barge Terminal Minor Commercial Landing Barge Fleeting Areas	Zone 5 - Industrial/ Commercial Development	1,786.3	5.5	403.0	1.0	338.2	6.0	326.9	0.8
Public Recreation Commercial Recreation	Zone 6 - Developed Recreation	4,308.3	13.2	2,306.8	5.7	1,647.2	4.1	1,703.7	4.2
Residential	Zone 7 - Residential Access	N/A	N/A	541.5	1.3	541.5	1.3	542.6	1.3
Total		39,516.5	121.3	40,236.0	100	40,236.0	100	40,236.0	100

*Total 1983 acreage reflects more than the 32,584 acres planned in the 1983 Plan due to multiple allocation tags on each parcel. For example, a parcel may be designated for both wildlife management and industrial purposes. For the purposes of preparing this table, that acreage is counted once under Zone 5 because it is available for both purposes today. Percent of land available for each designated zone is calculated based on the percent of total land planned in 1983 (32,584 acres). The total percentages wonit equal 100 percent due to having multiple allocation tags per parcel.

2.4 Impacts Summary

The range of impacts that could result from implementation of the alternatives is bracketed by the impacts of Alternatives A and B2. Alternative A potentially has greater acreages of land in developed uses, including industrial/commercial development and recreation, than the other alternatives. Alternative B1, in allowing additional recreational and industrial access, would have greater natural resource impacts than Alternative B2, which emphasizes natural resource conservation. Alternative B3 falls between the impacts of Alternatives B1 and B2.

A qualitative rating of the impacts for the alternatives on the different resources is provided in Table 2-6.

Implementation of Alternative A (No Action) would potentially result in substantially more industrial, commercial, and recreational development of Guntersville Reservoir than the three action alternatives. Alternative A potentially affects historic properties through agricultural and industrial proposals on Parcels 128, 165, 166, and 168. While these tracts and acreage are potentially developable, the site-specific review process would likely identify and avoid many impacts to cultural and natural resources.

The action alternatives differ in environmental impacts on 14 parcels, comprising 797 acres of TVA public land. Alternatives B1 and B3 would generally result in additional recreational, commercial, or industrial development, while these uses would not take place under Alternative B2. These proposals would result in direct impacts to terrestrial, ecological, and visual resources, with indirect impacts to water quality and aquatic resources. Selection of Alternatives B1 and B3 could eventually lead to conversion of prime farmland to industrial use or recreational use in parcels 26a, 161, 172, 200a, and 207. Because Alternative B3 would retain 200 acres in buffers or not grant all of some requests, these impacts would be less than for Alternative B1. In addition, adjacent human communities would be buffered from visual and other impacts under Alternative B3. Mitigation measures are included in parcel descriptions and in the EIS to further reduce impacts. These proposed mitigation measures (Section 4.9) would ensure wetlands and cultural resource protection, address aesthetic impacts of forest management activities, and control erosion and sedimentation from management activities.

Table 2-6 Summary of Impacts	ary of Impacts				
Resource	Potential Impacts	Alternative A	Alternative B1	Alternative B2	Alternative B3
Air	Emissions from construction and development activities	Greatest potential for air emissions due to most industrial development land	Generally insignificant impacts depending on the industries recruited	Least potential for air emissions	Generally insignificant impacts depending on the industries recruited
Aquatic Ecology	Alteration of aquatic habitat	Generally no change from existing conditions; some accelerated shoreline erosion due to clearing of riparian vegetation	Increases in woody shoreline vegetation over time would be beneficial	Increases in woody shoreline vegetation over time would be beneficial	Increases in woody shoreline vegetation over time would be beneficial.
Cultural Resources	Potential for activities to affect historic sites and structures	Resources protected; however, zoning did not consider the potential for impacts. These would be addressed in sitespecific reviews	Resources protected through phased identification and evaluation approach; zoning considered the potential for impacts. 14 known sites in development categories; further addressed in sitesspecific reviews	Resources protected through phased identification and evaluation approach; zoning considered the potential for impacts. Further addressed in site-specific reviews; 14 known sites protected in conservation zones	Resources protected through phased identification and evaluation approach; zoning considered the potential for impacts. 14 known sites in development categories; further addressed in sitesspecific reviews
Floodplains	Adverse effects to natural and beneficial floodplain values	Generally protected under EO 11988; greater potential for impacts because of more land allocated to development uses	Protected under EO 11988; insignificant effects because of zone 3 and 4 designations for most floodplain areas	Protected under EO 11988; insignificant effects because of zone 3 and 4 designations for most floodplain areas	Protected under EO 11988; insignificant effects because of zone 3 and 4 designations for most floodplain areas
Noise	Impacts on sensitive receptorsó residences and schools	Greatest potential for noise-producing activities	Less potential for noise- producing activities due to reductions in commercial and industrial development	Least potential for noise- producing activities	Less potential for noise- producing activities due to reductions in commercial and industrial development
Prime Farmland	Conversion of prime farmland	Potential development of 148 acres of prime farmland	Potential development of 20 acres of prime farmland	Potential development of 11 acres of prime farmland	Potential development of 20 acres of prime farmland
Recreation	Availability of facilities	More recreational development possible	More land for informal recreation; up to 5 new marinas	The most land for informal recreation	More land for informal recreation; up to 5 new marinas

Table 2-6 Summary of Impacts	ry of Impacts				
Resource	Potential Impacts	Alternative A	Alternative B1	Alternative B2	Alternative B3
Sensitive Plant and Animal Species	Adverse effects on state and federally-listed species	Generally protected; some potential for fragmentation of the resource	Suitable habitats placed in protective zones	Suitable habitats placed in protective zones	Suitable habitats placed in protective zones
Significant Natural Areas	Incompatible adjacent uses	Generally protected through environmental review process; additional natural area designations not proposed	Areas expanded: Additional Small Wild Areas and Habitat Protection Areas on parcels 3, 5, 39, 124, 182, 184, 193, 223, and 266; long term tenure for state WMAs	Areas expanded: Additional Small Wild Areas and Habitat Protection Areas on parcels 3, 5, 39, 124, 182, 184, 193, 223, and 266; long term tenure for state WMAs	Areas expanded: Additional Small Wild Areas and Habitat Protection Areas on parcels 3, 5, 39, 124, 182, 184, 193, 223, and 266; long term tenure for state WMAs
Socioeconomics	Local economy and land use	More industrial and recreational development possible	Some increases in employment due to potential industrial and recreational development	Lesser increase in employment due to several hundred fewer acres available for recreational and industrial development	Similar to Alternative B2
Terrestrial Ecology	Clearing and alteration of vegetation	Forested areas generally remain forested; stable wildlife levels	Some forest and wildlife management to maintain ecosystem health and productivity would likely have insignificant effects; development proposals would likely have negligible effects on the region	Some forest and wildlife management to maintain ecosystem health and productivity would likely have negligible effects on the region.	Some forest and wildlife management to maintain ecosystem health and productivity would likely have insignificant effects; development proposals would likely have negligible effects on the region
Water	Toxic substances, erosion and nutrient loading	More overall development of residential, industrial, and recreational developments on either TVA or private property could increase pollutant release.	More conservation zones would protect water quality; however some potential for impacts due to commercial, industrial, and recreational development	The most conservation zones would be most protective of water quality; however, forest and wildlife management could have some potential erosion impacts	More conservation zones would protect water quality; however, some potential for impacts due to commercial, industrial, and recreational development

Table 2-6 Summary of Impacts	ry of Impacts				
Resource	Potential Impacts	Alternative A	Alternative B1	Alternative B2	Alternative B3
Wetlands	Adverse effects to or destruction of wetlands	Generally protected under Section 404 and EO 11990; indirect impacts to functions and values through adjacent incompatible land uses	Protected; cumulatively beneficial effects through zone 3 designation for significant wetlands	Protected; cumulatively beneficial effects through zone 3 designation for significant wetlands	Protected: cumulatively beneficial effects through zone 3 designation for significant wetlands
Visual Resources	Effects on Scenic Quality		Distinctive scenic areas on 38 parcels placed in zone 3; up to 5 new marinas; some additional industrial and airport development	Distinctive scenic areas on 38 parcels placed in zone 3; less potential industrial development	Distinctive scenic areas on 38 parcels placed in zone 3; up to 5 new marinas; some additional industrial and airport development; impacts relatively less than B1 because of buffers for development proposals